



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/659,650

09/12/2000

Hassan Hagirahim

Hagirahim 8-7

6967

46363

7590

02/16/2006

PATTERSON & SHERIDAN, LLP/  
LUCENT TECHNOLOGIES, INC  
595 SHREWSBURY AVENUE  
SHREWSBURY, NJ 07702

EXAMINER

CHANG, RICHARD

ART UNIT

PAPER NUMBER

2663

DATE MAILED: 02/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/659,650	Applicant(s) HAGIRAHIM ET AL.	
	Examiner Richard Chang	Art Unit 2663	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 January 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,6-14,18-28,32 and 33 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,6-14,18-28,32 and 33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Amendment*

1. Applicant's arguments and amendment, filed on 01/27/2006, with respect to claims 1-2, 6-14, 18-28 and 32-33 have been considered but are moot in view of the new ground of rejection. The finality of the rejection of last Office action is withdrawn.

Claims 3-5, 15-17, 29-31 and 34 had been canceled.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2, 13-14, 27-28 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over US patent No. 6, 363,065 B1 ("Thornton et al.") in view of US patent 6, 918,034 B1 ("Sengodan et al.") and further in view of US patent 6, 717,948 B1 ("Subbiah").

Regarding claims 1, 13, 27 and 33, Thornton et al. teach a method, system and apparatus for a Voice over Internet Protocol (VoIP) gateway (200, 200') network (5) comprising of:

receiving voice traffic (Time Division Multiplexed (TDM) telephony serial signal stream from PBX 14) at a first Voice over Internet Protocol telephony gateway (200) (See Fig. 2, Col. 12, lines 42-44),

determining (within the DSP 225 and the microcontroller 240) whether an appropriate destination IP address is serviced over the data network to a destination peer gateway (200', second VOIP gateway) (See Fig. 2, Col. 13, lines 57-62 and Col. 14, lines 3-8),

multiplexing, at said first VOIP gateway (200), said voice traffic (incoming TDM serial signal stream) with a second voice traffic if said second voice traffic is being provided to second said VOIP gateway (200') (See Fig. 2, Col. 13, lines 52-56), and the processing of RTP header packet (See Col. 22, lines 56-63).

Thornton et al. teaches substantially all the claimed invention but did not disclose expressly the particular application involving limitations of transporting said multiplexed voice traffic to said second VOIP gateway utilizing a plurality of transport packets and the structure of Real-Time Transport packet (RTP).

Sengodan et al. teach a method and apparatus of VOIP gateways for multiplexing RTP packet with payload (see Fig. 1, Col. 5, lines 50-58) comprising of

multiplexing, at said first VOIP gateway (120), said voice traffic (330 incoming TDM serial signal stream) with a second voice traffic (350 incoming TDM serial signal stream), if said second voice traffic (350) being provided to second said VOIP gateway (122'), and

transporting said multiplexed voice traffic (320-370) to said second VOIP gateway (122) utilizing a plurality of transport packets (300), responsive to an affirmative determination that said destination is serviced by said second VOIP gateway (200') (See Fig. 3, Col. 7, lines 46-52),

wherein said transport packets are User Datagram Protocol (UDP)/Internet Protocol (IP) packets and wherein the UDP/IP packets transport at least one modified Real-Time Transport (RTP) packet (See Fig. 3, Col. 7, lines 46-52),

wherein said modified RTP packet (320-330) comprise at least one of:

A Payload field for containing a voice traffic (330, See Fig. 3, Col. 7, lines 46-52),

a Call Identifier (CI) field for identifying a caller (210),

a Length Indicator (LI) field for identifying the size of the payload field (210, See Fig. 2, Col. 6, lines 47-55).

A person of ordinary skill in the art would have been motivated to employ Sengodan et al. in Thornton et al. in order to obtain a method, system and apparatus for a Voice over Internet Protocol gateway and to take advantage of transporting the multiplexed voice traffic to the second VOIP gateway utilizing a plurality of UDP/IP transport packets of the same destination of second VOIP gateway wherein said UDP/IP transport packets with modified RTP packet including RTP payload Call Identifier field and the Length Indicator field in claims 1, 13, 27 and 33.

The suggestion/motivation to do so would have been to transport the multiplexed voice traffic to the second VOIP gateway utilizing a plurality of UDP/IP transport packets of the same destination of second VOIP gateway wherein said UDP/IP transport packets with modified RTP packet including RTP payload Call Identifier field and the Length Indicator field, as suggested by Sengodan et al. in Col. 6, lines 47-55 and Col. 7, lines 46-52. At the time the invention was made, therefore, it would have been obvious

Art Unit: 2663

to one of ordinary skill in the art to which the invention pertains to combine Sengodan et al. with Thornton et al. to obtain the inventions specified in claims 1, 13, 27 and 33.

Thornton et al. and Sengodan et al. teach substantially all the claimed invention but did not disclose expressly the particular application involving limitations of a Header Error Check field for identifying errors in the Call Identifier field and the Length Indicator field.

Subbiah teaches an AAL2 type RTP packet Header (210) with Header Error Check field (205) for identifying errors in the Call Identifier field (202) and the Length Indicator field (203) (See Fig. 2, Col. 5, lines 26-37).

A person of ordinary skill in the art would have been motivated to employ Subbiah in Thornton et al. and Sengodan et al. in order to obtain a method, system and apparatus for a Voice over Internet Protocol gateway and to take advantage of using an AAL2 type RTP packet Header with a Header Error Check field for identifying errors in the Call Identifier field and the Length Indicator field in claims 1, 13, 27 and 33.

The suggestion/motivation to do so would have been to use an AAL2 type RTP packet Header with a Header Error Check field for identifying errors in the Call Identifier field and the Length Indicator field, as suggested by Sengodan et al. 2<sup>nd</sup> Reference in Col. 5, lines 26-37. At the time the invention was made, therefore, it would have been obvious to one of ordinary skill in the art to which the invention pertains to combine Subbiah with Thornton et al. and Sengodan et al. to obtain the inventions specified in claims 1, 13, 27 and 33.

Regarding claims 2, 14 and 28, these claims have limitations that is similar to those of claims 1, 13 and 27 and Thornton et al. further teach that the receiving the incoming T1-line (263) TDM telephony serial signal stream (voice traffic) (See Fig. 2, Col. 12, lines 42-44) at the gatekeepers (420) of an originating VoIP gateway (200) is received within the payload portions of user Datagram Protocol (UDP/Internet Protocol (IP)) packets (See Fig. 4A, Col. 17, lines 34-42), thus it is rejected with the same rationale applied against claims 1, 13 and 27 above.

4. Claims 6-12, 18-26 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over US patent No. 6, 363,065 B1 ("Thornton et al.") in view of US patent 6, 918,034 B1 ("Sengodan et al.") and US patent 6, 717,948 B1 ("Subbiah") and further in view of US patent 5,600,653 ("Chitre et al.").

Regarding claims 6, 18 and 32, these claims have limitations that is similar to those of claims 1, 13 and 27 and Thornton et al. further teach that the Header Error Check field performs one bit error correction.

Thornton et al. and Sengodan et al. and Subbiah teach substantially all the claimed invention but did not disclose expressly the particular application involving limitations of the Header Error Check field performs one bit error correction.

Chitre et al. teach an error correction technique for AAL cell packet header wherein the Header Error Check field performs one bit error correction (See Col. 6, lines 41-59).

A person of ordinary skill in the art would have been motivated to employ Chitre et al. in Thornton et al. and Sengodan et al. and Subbiah in order to obtain a method, system and apparatus for a Voice over Internet Protocol gateway and to take advantage of using an error correction technique for AAL cell packet header wherein the Header Error Check field performs one bit error correction in claims 6, 18 and 32.

The suggestion/motivation to do so would have been to use an error correction technique for AAL cell packet header wherein the Header Error Check field performs one bit error correction, as suggested by Chitre et al. in Col. 6, lines 41-59. At the time the invention was made, therefore, it would have been obvious to one of ordinary skill in the art to which the invention pertains to combine Chitre et al. with Thornton et al. and Sengodan et al. and Subbiah to obtain the inventions specified in claims 6, 18 and 32.

Regarding claims 7 and 19, these claims have limitations that is similar to those of claims 1 and 18 and Thornton et al. further teach that the first VoIP gateway (200) and the second VoIP gateway (200') follows all the H.323 Call signaling and control protocols for communicating messages between said VOIP gateway and said second VoIP gateway (See Fig. 12, Col. 42, line 53 - Col. 43, line 19), thus it is rejected with the same rationale applied against claims 1 and 18 above.

Regarding claims 8 and 20, these claims have limitations that is similar to those of claims 7 and 19 and Thornton et al. further teach that the first VoIP gateway (200) and the second VoIP gateway (200') follows all the H.323 Call signaling and control protocols and said first VoIP gateway (200) communicates an Open Logical Channel



Art Unit: 2663

message to said second VoIP gateway (200') including said VoIP gateway's port number and Call Identifier of the calling party (See Fig. 13, Col. 44, lines 15-39), thus it is rejected with the same rationale applied against claims 7 and 19 above.

Regarding claims 9 and 21, these claims have limitations that is similar to those of claims 8 and 20 and Thornton et al. further teach that the first VoIP gateway (200) and the second VoIP gateway (200') follows the H.323 Call signaling and control protocols and in response to said Open Logical Channel message said second VoIP gateway (200') communicates an Open Logical Channel message including said second VoIP gateway's (200') port number and Call Identifier for the called party (See Fig. 13, Col. 44, lines 15-39), thus it is rejected with the same rationale applied against claims 8 and 2 above.

Regarding claims 10 and 22, these claims have limitations that is similar to those of claims 7 and 19 and Thornton et al. further teach that the first VoIP gateway (200) and the second VoIP gateway (200') follows the H.323 Call signaling and control protocols and in response to a caller terminating a call said VoIP gateway communicates a Close Logical Channel message including said VOIP gateway's port number and said Call Identifier of the calling party to said second VoIP gateway (200') (See Fig. 14, Col. 47, lines 19-51), thus it is rejected with the same rationale applied against claims 7 and 19 above.

Regarding claims 11 and 23, these claims have limitations that is similar to those of claims 7 and 19 and Thornton et al. further teach that the first VoIP gateway (200) and the second VoIP gateway (200') follows the H.323 Call signaling and control

Art Unit: 2663

protocols and in response to said Close Logical Channel message said second VoIP gateway (200') communicates a Close Logical Channel ACK message including said second VoIP gateway's (200') port number and said Call Identifier of the called party (See Fig. 14, Col. 47, lines 19-51), thus it is rejected with the same rationale applied against claims 7 and 19 above.

Regarding claims 12, 24 and 26, these claims have limitations that is similar to those of claims 1, 13 and 27 and Thornton et al. further teach the gatekeeper (420) determines whether it can resolve the called number into an IP address of the called gateway (200', said second VOIP gateway) (See Fig. 12, Col. 43, lines 10-15), thus it is rejected with the same rationale applied against claims 1, 13 and 27 above.

Regarding claim 25, this claim has limitations that is similar to those of claim 1 and Thornton et al. further teaches that that the gateway (200) is a microcontroller (240 as processor) based system having flash memory (205 as storage device) (See Fig. 2, Col. 11, lines 65-66), which stores program code (instruction) and other information for the gateway (200) operations (See Fig. 2, Col. 15, lines 23-24), thus it is rejected with the same rationale applied against claim 1 above.

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Chang whose telephone number is (571) 272-3129. The examiner can normally be reached on Monday - Friday from 8 AM to 5 PM.

Art Unit: 2663

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571) 272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*RKC*

rkc

Richard Chang  
Patent Examiner  
Art Unit 2663

  
**RICKY Q. NGO**  
SUPERVISORY PATENT EXAMINER